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MICROSENSORS FOR GLUCOSE AND INSULIN MONITORING

ABSTRACT OF THE DISCLOSURE

A dual sensor for the simultaneous amperometric monitoring of glucose and insulin, wherein the glucose probe is based on the biocatalytic action of glucose oxidase, and the insulin probe is based on the electrocatalytic activity of metal oxide. Further provided is an oxidase enzyme composite electrode with an internal oxygen-rich binder. The present invention also optionally includes metallizing components within the carbon paste to eliminate signals from interfering compounds. The present invention includes embodiments for both *in vitro* and *in vivo* uses.